

Listing of The Claims:

1. (Currently amended): An isolated or purified nucleic acid molecule comprising a polynucleotide having the ~~a nucleotide sequence at least 95% identical to a nucleotide sequence~~ of a *Ketogulonigenium* plasmid replicon found on the endogenous plasmid contained in Deposit No. NRRL B-30035, ~~wherein said replicon comprises SEQ ID NO:4 or a fragment thereof, wherein said fragment is capable of functioning as a replicon in *Ketogulonigenium*.~~

2. (Currently amended): The nucleic acid molecule of claim 1, wherein said replicon comprises ~~said fragment, wherein said fragment comprises~~ the nucleic acid sequence shown in SEQ ID NO:1.

3. (Original): The nucleic acid molecule of claim 1, comprising the DNA sequence shown in SEQ ID NO:3.

4. (Previously presented): The nucleic acid molecule of claim 1, wherein said replicon comprises the DNA sequence shown in SEQ ID NO:4.

5. (Original): The nucleic acid molecule of claim 1, comprising a replicon functional in *E. coli*.

6. (Original): The nucleic acid molecule of claim 1, comprising a replicon functional in an organism selected from the genera consisting of *Acetobacter*, *Corynebacterium*, *Bacillus*, *Rhodobacter*, *Paracoccus*, *Roseobacter*, *Pseudomonas*, *Pseudogluconobacter*, *Gluconobacter*, *Serratia*, *Mycobacterium*, and *Streptomyces*.

7. (Previously presented): The nucleic acid molecule of claim 1, comprising a mob site.

8. (Previously presented): The nucleic acid molecule of claim 7, wherein said mob site comprises a mob gene and an oriT from a conjugation plasmid.

9. (Original): The nucleic acid molecule of claim 8, wherein said conjugation plasmid is selected from plasmids which are included within the incompatibility groups consisting of IncP, IncQ, IncC, IncB, IncF, IncG, IncI, IncK, IncM, IncN, IncPa, IncPb, IncW, IncX, and IncZ.

10. (Original): The nucleic acid molecule of claim 1, comprising a temperature-sensitive replicon.

11. (Original): The nucleic acid molecule of claim 1, comprising at least one marker gene.

12. (Original): The nucleic acid molecule of claim 11, wherein said marker gene comprises a nucleotide sequence operative to direct synthesis of a protein conferring antibiotic resistance in a host cell population.

13. (Original): The nucleic acid molecule of claim 12, wherein said antibiotic is selected from the group comprising ampicillin, chloramphenicol, erythromycin, kanamycin, spectinomycin, streptomycin and tetracycline.

14. (Original): The nucleic acid molecule of claim 1, comprising at least one further nucleic acid sequence, wherein said further nucleic acid sequence is selected from the group consisting of a polylinker insert, an expression control sequence, a cos site, a terminator sequence, a ribosome binding site, a DNA sequence encoding a signal peptide, a DNA sequence encoding a polypeptide and a DNA sequence encoding a polypeptide containing one or more signal peptides.

15-16. (Cancelled)

17. (Original): The nucleic acid molecule of claim 14, further comprising a His-Tag sequence.

18. (Previously presented): The nucleic acid molecule of claim 14, further comprising a nucleic acid sequence encoding a polypeptide sequence not expressed natively in *Ketogulonigenium*.

19. (Previously presented): The nucleic acid molecule of claim 14, wherein said further nucleic acid sequence is said cos site.

20. (Original): The nucleic acid molecule of claim 1, further comprising a DNA sequence from an *E. coli*-derived plasmid.

21. (Previously presented): The nucleic acid molecule of claim 20, wherein said *E. coli*-derived plasmid is selected from the group consisting of pET, pUC18, and pUC19.

22. (Original): The nucleic acid molecule of claim 1, further comprising a reporter gene.

23. (Previously presented): The nucleic acid molecule of claim 22, wherein said reporter gene encodes a protein selected from the group consisting of β -galactosidase, β -glucuronidase, luciferase, green fluorescent protein α -amylase, and uroporphyrinogen III methyltransferase (cobA) from *Propionibacterium freudenreichii*.

24. (Previously presented): The nucleic acid molecule of claim 1, wherein said nucleic acid molecule autonomously replicates in *Ketogulonigenium* and in at least one organism selected from the genera consisting of *Acetobacter*, *Corynebacterium*, *Bacillus*, *Rhodobacter*, *Paracoccus*, *Roseobacter*, *Pseudomonas*, *Pseudogluconobacter*, *Gluconobacter*, *Serratia*, *Mycobacterium*, and *Streptomyces*.

25. (Original): A transformed *Escherichia coli* cell comprising the nucleic acid molecule of claim 1.
26. (Original): A transformed *Ketogulonigenium* cell comprising the nucleic acid molecule of claim 1.
27. (Original): A method for producing a polypeptide, comprising culturing a host cell comprising the nucleic acid molecule of claim 14 under conditions such that said polypeptide is expressed, and recovering said polypeptide.
28. (Original): A method of transforming a host cell with a nucleic acid comprising:
- (a) transforming a host cell with the nucleic acid of claim 1; and
 - (b) obtaining a stably transformed host cell.
29. (Original): The method of claim 28, wherein said transformation comprises conjugation.
30. (Original): The method of claim 28, wherein said transformation comprises electroporation.
31. (Previously presented): The nucleic acid molecule of claim 14, wherein said further nucleic acid sequence is said expression control sequence.
32. (Previously presented): The nucleic acid molecule of claim 31, wherein said expression control sequence comprises an *E. coli*-derived promoter.
33. (Previously presented): The nucleic acid molecule of claim 31, wherein said expression control sequence comprises a *Ketogulonigenium*-derived promoter.
34. (Previously presented): The nucleic acid molecule of claim 14, wherein said further nucleic acid sequence is said polylinker insert.

35. (Previously presented): The nucleic acid molecule of claim 14, wherein said further nucleic acid sequence is said terminator sequence.

36. (Previously presented): The nucleic acid molecule of claim 14, wherein said further nucleic acid sequence is said ribosome binding site.

37. (Previously presented): The nucleic acid molecule of claim 14, wherein said further nucleic acid sequence is said DNA sequence encoding a signal peptide.

38. (Previously presented): The nucleic acid molecule of claim 14, wherein said further nucleic acid sequence is said DNA sequence encoding a polypeptide.

39. (Previously presented): The nucleic acid molecule of claim 14, wherein said further nucleic acid sequence is said DNA sequence encoding a polypeptide containing one or more signal peptides.

40. (New): An isolated nucleic acid molecule hybridizing under stringent hybridization conditions to a *Ketogulonigenium* plasmid replicon found on the endogenous plasmid contained in Deposit No. NRRL B-30035.

41. (New): An isolated nucleic acid molecule hybridizing under stringent hybridization conditions to the nucleic acid sequence shown in SEQ ID NO:1.

42. (New): An isolated nucleic acid molecule hybridizing under stringent hybridization conditions to the nucleic acid sequence shown in SEQ ID NO:3.

43. (New): An isolated nucleic acid molecule hybridizing under stringent hybridization conditions to the nucleic acid sequence shown in SEQ ID NO:4.